Attachment
4

Pajaro River Watershed IRWM Implementation Proposal
Budget

This attachment provides detailed budget documentation supporting the Pajaro River Watershed IRWM Implementation Proposal costs shown in Table 4-1, Budget. The budget tables are completed for each project in the proposal. In addition, a detailed estimate and basis of costs that supports the project budgets is included. Each task and budget category shown in the table agrees with Attachment 3 Workplan and Attachment 5 Schedule for all projects and the overall Pajaro River Watershed IRWM Implementation Proposal.

The funding match for the proposal is 85% as shown in Table 4-1. The proposal includes a critical water supply project for a Disadvantaged Community (Pajaro), however, the minimum funding match of 25% is satisfied by other projects in the proposal.

The grant request amount is the maximum available to the Central Coast Funding Area. Project sponsors acknowledge that the Department of Water Resources may opt to partially fund the proposal. If selected for partial funding, the Pajaro River Watershed project sponsors may reduce funding allocations to some or all of the projects or may delay implementation of project components. The approach for managing a reduced funding award would be dependent upon the level of funding; however, the project sponsors acknowledge this possibility and have committed to working together to accommodate the potential funding shortfall.

Table 4-1 Pajaro River Watershed IRWM Implementation Proposal Summary Budget

Table 4-1: Summary Budget Proposal Title: Pajaro River Watershed IRWM Implementation Proposal					
Individual Project Title	**Requested Grant Amount**	**Cost Share: Non-State Fund Source**	**Cost Share: Other State Fund Source**	**Total Cost**	**% Funding Match**
Project 1. Hollister Urban Area Water Project	$4,102,000	$27,599,983	$0	$31,701,983	87%
Project 2. Critical Water Supply System Improvements for Pajaro	$1,770,000	$0	$0	$1,770,000	0%
Project 3. Increased Recycled Water Storage Project	$903,000	$5,260,618	$0	$6,163,618	85%
Project 4. Pajaro Agricultural Water Quality and Aquifer Enhancement Project	$425,000	$70,000	$0	$495,000	14%
Pajaro River Watershed IRWM Implementation Grant Administration	$369,000	$0	$0	$369,000	0%
Proposal Total	**$7,569,000**	**$32,930,601**	**$0**	**$40,499,601**	**81%**
DAC Funding Match Waiver Total				**$1,770,000**	
Grand Total				**$38,729,601**	**85%**

Note: **All costs are in 2012 dollars.**

Project 1 Hollister Urban Area Water Project

Table 4.2 contains the budget for the Hollister Urban Area (HUA) Water Project which is composed of the Lessalt Water Treatment Plant (WTP) Upgrade, a new pipeline from the Lessalt WTP to the Ridgemark / High Pressure Zone, and the West Hills WTP. The budget is based on the latest project documentation including the respective Engineer's estimates for each of the three project components.

The total project cost is $31,701,983, the funding request amount is $4,102,000, and the funding match percentage is 87% as documented in Table 4.2

Non-state share funds (matching funds) are secured by property tax revenues collected by San Benito County Water District (SBCWD) from the landowners in Zone 6 and rate increases for the City of Hollister (City) and Sunnyslope County Water District (SSCWD) retail customers. SBCWD will self-finance the project costs and will be reimbursed by the City and SSCWD over a period of 30 years. Rate Studies are currently underway and Proposition 218 noticing and hearings are scheduled for April through June 2013. The funding strategy was adopted by each agency (SBCWD, City, and SSCWD) in the Statement of Intent, September 2011 (Exhibit 7.5).

Table 4.2: Project Budget for the Hollister Urban Area Water Project

Proposal Title: Pajaro River Watershed IRWM Implementation Proposal					
Project Title: Hollister Urban Area Water Project					
Project serves a need of a DAC?			☐ **Yes**	☒ **No**	
Funding Match Waiver Request?			☐ **Yes**	☒ **No**	
		(a)	**(b)**	**(c)**	**(d)**
Category		**Requested Grant Amount**	**Cost Share: Non-State Fund Source***	**Cost Share: Other State Fund Source***	**Total Project Cost**
(a)	**Direct Project Administration**	**$0**	**$511,525**	**$0**	**$511,525**
	Task 1. Administration	$0	$450,000	$0	$450,000
	Task 2. Labor Compliance Program (Task 13.1)	$0	$0	$0	$0
	Task 3. Reporting	$0	$56,900	$0	$56,900
	Task 4. Project Performance Monitoring Plan	$0	$4,625	$0	$4,625
(b)	**Land Purchase/ Easement (Task 5)**	**$0**	**$0**	**$0**	**$0**
(c)	**Planning/Design/Engineering/Environmental**	**$0**	**$3,673,283**	**$0**	**$3,673,283**
	Task 6. Assessment and Evaluation	$0	$882,566	$0	$882,566
	Task 7. Final Design	$0	$2,274,174	$0	$2,274,174
	Task 8. Environmental Documentation	$0	$418,543	$0	$418,543
	Task 9. Permitting	$0	$98,000	$0	$98,000
(d)	**Construction / Implementation**	**$4,102,000**	**$17,205,673**	**$0**	**$21,307,673**
	Task 10. Construction Contraction	$0	$20,800	$0	$20,800
	Subtask 11.1 Lessalt WTP Upgrade	$0	$5,548,000	$0	$5,548,000
	Subtask 11.2 Pipeline to Ridgemark / High Zone	$0	$986,250	$0	$986,000
	Subtask 11.3 West Hills WTP	$4,102,000	$10,650,623	$0	
(e)	**Environmental Compliance/Mitigation/Enhance.**	**$0**	**$900,000**	**$0**	**$900,000**
	Subtask 12.1 Lessalt WTP and Pipeline to Ridgemark	$0	$0	$0	$0
	Subtask 12.2 West Hills WTP	$0	$900,000	$0	$900,000
(f)	**Construction Administration**	**$0**	**$2,329,125**	**$0**	**$2,329,125**
	Lessalt WTP Upgrade and Pipeline to Ridgemark	$0	$629,125	$0	$629,125
	West Hills WTP	$0	$1,700,000	$0	$1,700,000
(g)	**Other Costs**	**$0**	**$0**	**$0**	**$0**

(h)	**Construction/ Imp. Contingency**	**$0**	**$2,980,378**	**$0**	**$2,980,378**
	Lessalt WTP Upgrade and Pipeline to Ridgemark	$0	$440,000	$0	$440,000
	West Hills WTP	$0	$2,540,378	$0	$2,540,378
(i)	**Grand Total**	**$4,102,000**	**$27,599,983**	**$0**	**$31,701,983**

*****The source of the Non-State share is secured by property tax revenues collected by SBCWD and Rate Increases for the City and SSCWD retail customers. SBCWD will self-finance the project costs and will be reimbursed by the City and SSCWD. Rate Studies are currently underway and Proposition 218 noticing and hearings are scheduled for April – June, 2013. The funding strategy was adopted by each agency in the Statement of Intent (9/11).

Basis of Detailed Budget Cost Estimates

The following sections provide additional detail about the HUA category costs identified in Table 4.2.

Budget Category (a): Direct Project Administration

Direct project administration costs in Budget Category (a) are not a part of the requested grant funding and are submitted for consideration as matching funds. Other administrative costs are included within the other budget categories as part of the staff time required to complete the designated work.

Task 1. Administration

Administration for the HUA Water Project is estimated to be $450,000 and equates to approximately 2%, based on prior experience, of the estimated total construction cost. The project is anticipated to begin in late September 2013 and be completed in July 2016.

Task 2. Labor Compliance Program

The labor compliance program is administered by San Benito County Water District under their existing program. Under this program, the Construction Manager reviews contractor's payroll submittals for labor compliance with the State labor code. Costs for the Labor Compliance Program are included in the cost estimate for Construction Management in Task 13.1, Construction Administration. No additional/separate expenditures are anticipated under Task 2.

Task 3. Reporting

This task includes creation of quarterly project reports to be provided to DWR that describe the progress and accomplishments for the quarter and the Final Project Completion Report. The estimated cost to prepare the reports is $56,900 and includes approximately 190 hours per year for three years at a staff rate of $100 per hour.

Task 4: Project Performance Monitoring Plan (PPMP)

The PPMP will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated as summarized in Attachment 6. The estimated cost to prepare the PPMP is $4,625 and includes 37 hours at a staff rate of $125 per hour. This is based on PPMP costs prepared for similar grant programs.

Budget Category (b): Land Purchase / Easement

All improvements made and facilities constructed for the HUA Water Project will be constructed on property owned by SBCWD, the City, or SSCWD and within existing easements, County right-of-way and USBR right-of-way. Thus, the project will not require purchase of land or easements. Grant funding is not being requested for this task.

Budget Category (c): Planning/ Design/ Engineering/ Environmental Documentation

Planning, environmental documentation, and 100% design are complete for the Pipeline to the Ridgemark / High Zone. For the Lessalt WTP Upgrade, planning is complete, the design has been advanced to the 95% stage, and an Environmental Checklist in support of a Categorical

Exemption is expected to be complete in April 2013. Planning is complete for the West Hills WTP and preparation of the EIR is underway. The status of these components is described in the Completed Work section of Attachment 3. The costs incurred since September 2011 (the date of the Statement of Intent adopted by SBCWD, the City, and SSCWD) are included as the Non-State share (funding match). Grant funding is not being requested for this task.

Task 6. Assessment and Evaluation

No additional assessment and evaluation is included. This task is complete, as described in the Completed Work section of Attachment 3. The $882,566 in costs associated with this task are included as match.

Task 7. Final Design

The Lessalt WTP Upgrade design must be advanced from the 95% design level to final bid documents. The costs spent to date total $633,239 and the estimated cost to complete this task is estimated at approximately $30,000 based on remaining contract value for the design consultant.

The West Hills WTP design is scheduled to start in April 2013. The design consultant has been retained and their budget to complete the design is $1,610,935. This budget includes development of 50%, 90%, and 100% design submittals as well as technical tasks to support environmental compliance, project management and as-needed design support tasks. The estimate for the design submittals is based on a detailed sheet list, including 181 drawings.

Task 8. Environmental Documentation

The Environmental Checklist / Categorical Exemption will be completed for the Lessalt WTP upgrade. In addition, the West Hills WTP EIR (under CEQA) and EA (under NEPA) will be completed. The costs spent to date total $81,543 and the estimated cost to complete these tasks is estimated at approximately $337,000 based on remaining contract value for the environmental consultant.

Task 9. Permitting

As described in the Work Completed section of Attachment 3, permitting requirements for the Lessalt WTP Upgrade and Pipeline to the Ridgemark / High Pressure Zone are complete.

This task includes permitting for the West Hills WTP, which is estimated at $98,000 based on the contract with the design consultant.

Budget Category (d): Construction/ Implementation

Grant funding is being requested for this task.

Task 10. Construction Contracting

This task includes the cost to advertise, conduct pre-bid meetings, evaluate bids and award the construction contracts for the 1) Lessalt WTP Upgrade and Pipeline to Ridgemark / High Pressure Zone and 2) the West Hills WTP. The cost is estimated to be approximately $20,800 ($10,400 each) and provides adequate budget for 160 staff hours at a rate $130/hour. The anticipated work effort is consistent with past experience.

Task 11. Construction

The construction costs for each of the three project components are based on the latest engineer's cost estimates, respectively. The detailed estimates are provided in Exhibit 4.1 and are summarized in the table below.

Project Component	Construction Cost
Lessalt WTP Upgrade	$5,548,000
Pipeline to Ridgemark / High Zone	$986,250
West Hills WTP	$14,752,623
Total	**$21,286,873**

Budget Category (e): Environmental Compliance/ Mitigation/ Enhancement

As described in the Work Plan in Attachment 3, there are two subtasks in Task 12. Grant funding is not being requested for this task.

Subtask 12.1 Lessalt WTP and Pipeline to Ridgemark / High Zone

The cost for compliance and mitigation required for the Lessalt WTP Upgrade and the Pipeline to Ridgemark / High Zone is assumed to be included in the costs for construction administration as the costs are not anticipated to be significant.

Subtask 12.2 West Hills WTP

As described in the Work Plan in Attachment 3, development of the West Hills site will require compensation of habitat that would be lost on-site. In addition, there are multiple species of concern associated with the site, including the California tiger Salamander, San Joaquin kit fox, and burrowing owl. Thus, a dedicated environmental monitor will be required during construction.

The compensatory mitigation is estimated at $675,000 based on a unit cost of approximately $39,500 per acre and 17 acres of habitat replacement. The on site environmental monitor is estimated to be $225,000 based on an estimate prepared by the environmental consultant.

Budget Category (f): Construction Administration

The cost to administer construction of the Lessalt WTP Upgrade and Pipeline to the Ridgemark / High Pressure Zone, including construction management and engineering services during construction, is estimated to be approximately 9 percent of the $6,986,250 combined raw construction cost (including contingency). The cost for construction management for these two components is estimated at $629,125.

The cost to administer construction of the West Hills WTP, including construction management and engineering services during construction, is estimated to be approximately 10 percent of the $17,290,000 raw construction cost (including contingency). The cost for construction management for the West Hills WTP is estimated at $1,700,000.

Grant funding is not being requested for this task.

Budget Category (g): Other Costs

No costs are included in this category.

Budget Category (h): Construction/ Implementation Contingency

The budget included with this task is based on the engineer's estimates for the respective project components. The current contingency included with the Lessalt WTP Upgrade project is 8%, resulting in a budget of $440,000, and is consistent with the level of design (95%). No contingency has been included in the cost estimate for the Pipeline to Ridgemark / High Pressure Zone. This project is relatively straightforward and the risks are well known; thus the agencies are confident in the cost estimate provided.

The current contingency included with the West Hills WTP project is 20%, resulting in a budget of $2,540,378. The higher level of contingency associated with the West Hills WTP budget is appropriate given that the estimate is based on a conceptual 10% design included in the Preliminary Design Report.

Grant funding is not being requested for this task.

Project 2 Critical Water Supply System Improvements for Pajaro

Table 4.3 contains the budget for the Critical Water Supply System Improvements for Pajaro which is a Disadvantaged Community in the Pajaro River Watershed. The budget is composed of the planning, engineering, design and construction costs for a new 600,000 gallon steel tank to be sited on land already owned by the Pajaro Sunny Mesa Community Services District. The budget is based on the Preliminary Engineering Report prepared by the design engineer, Kennedy / Jenks (Exhibit 7.13).

The total project cost is $1,770,000, the funding request amount is for the full amount of $1,770,000, as documented in Table 4.3. As part of the commitment to addressing the critical water supply and water quality needs of Disadvantaged Communities, the full project cost was proposed for grant funding to ensure project implementation. Therefore, there is no project match for this DAC project. However, as documented in Table 4.1, the overall proposal match is well over the minimum required 25% match.

Table 4.3: Critical Water Supply System Improvements for Pajaro

Proposal Title: Pajaro River Watershed IRWM Implementation Proposal					
Project Title: Critical Water Supply System Improvements for Pajaro					
Project serves a need of a DAC?			☒ **Yes**	☐ **No**	
Funding Match Waiver Request? The project will not provide any match, however, the overall proposal satisfies the minimum match requirement. Thus a match waiver is not required.			☐ **Yes**	☒ **No**	
		(a)	**(b)**	**(c)**	**(d)**
Category		**Requested Grant Amount**	**Cost Share: Non-State Fund Source***	**Cost Share: Other State Fund Source***	**Total Project Cost**
(a)	**Direct Project Administration**	**$26,000**	**$0**	**$0**	**$26,000**
	Task 1. Administration	$12,000	$0	$0	$12,000
	Task 2. Labor Compliance Program (Task 13.1)	$0	$0	$0	$0
	Task 3. Reporting	$12,000	$0	$0	$12,000
	Task 4. Project Performance Monitoring Plan	$2,000	$0	$0	$2,000
(b)	**Land Purchase/ Easement (Task 5)**	**$0**	**$0**	**$0**	**$0**
(c)	**Planning/Design/Engineering/Environmental**	**$204,000**	**$0**	**$0**	**$204,000**
	Task 6. Assessment and Evaluation				
	Geotechnical Investigation	$25,000	$0	$0	$25,000
	Site Topographic Survey	$15,000	$0	$0	$15,000
	Task 7. Final Design				
	60% Design	$95,000	$0	$0	$95,000
	Final Design	$45,000	$0	$0	$45,000
	Task 8. Environmental Documentation	$22,000	$0	$0	$22,000
	Task 9. Permitting	$2,000	$0	$0	$2,000
(d)	**Construction / Implementation**	**$1,177,000**	**$0**	**$0**	**$1,177,000**
	Task 10. Construction Contraction	$20,000	$0	$0	$20,000
	Task 11. Construction	$1,157,000	$0	$0	$1,157,000
(e)	**Environmental Compliance/Mit./Enhance. (Task 12)**	**$0**	**$0**	**$0**	**$0**
(f)	**Construction Administration (Task 13)**	**$120,000**	**$0**	**$0**	**$120,000**
(g)	**Other Costs**	**$0**	**$0**	**$0**	**$0**
(h)	**Construction/ Imp. Contingency (Task 13)**	**$243,000**	**$0**	**$0**	**$243,000**
(i)	**Grand Total**	**$1,770,000**	**$0**	**$0**	**$1,770,000**

Basis of Detailed Budget Cost Estimates

The following sections provide additional detail about the Critical Water Supply System Improvements for Pajaro category costs identified in Table 4.3.

Budget Category (a): Direct Project Administration

Direct project administration costs in Budget Category (a) include general project administration, grant invoicing, and labor compliance program documentation (payroll review included in Task 13).

Task 1. Administration

Administration for the HUA Water Project is estimated to be $12,000 and equates to approximately 2%, based on prior experience, of the estimated total construction cost. The project is anticipated to begin immediately following grant notification in October 2013 and be completed in September 2015.

Task 2. Labor Compliance Program

The Pajaro Sunny Mesa Community Services District will document compliance with the State labor code requirements. The Construction Manager will review contractor's payroll submittals for labor compliance with the State labor code. Costs for the Labor Compliance Program are included in the cost estimate for Construction Management in Task 13, Construction Administration. No additional/separate expenditures are anticipated under Task 2.

Task 3. Reporting

This task includes creation of quarterly project reports to be provided to the grant administrator, San Benito County Water District, that describe the progress and accomplishments for the quarter, and preparation of the Final Project Completion Report. The estimated cost to prepare the reports is $12,000 and includes approximately 15 hours per quarter for two years (120 hours total) for a staff rate of $100 per hour.

Task 4: Project Performance Monitoring Plan (PPMP)

The PPMP will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated as summarized in Attachment 6. The estimated cost to prepare the PPMP is $2,000 and includes 20 hours at a staff rate of $100 per hour. This is based on PPMP costs prepared for similar grant programs.

Budget Category (b): Land Purchase / Easement

All improvements made and facilities constructed for the Critical Water Supply System Improvements will be constructed on property owned by PSMCSD. Thus, the project will not require purchase of land or easements. Grant funding is not being requested for this task.

Budget Category (c): Planning/ Design/ Engineering/ Environmental Documentation

The preliminary engineering is complete for the project (Exhibit 4.2). Additional site investigations, including a geotechnical investigation and site surveying must be completed prior to engineering. Additionally, the CEQA documentation must be completed for the project and,

given the nature of the project, is cost estimated based on the development of a Mitigated Negative Declaration.

Task 6. Assessment and Evaluation

A geotechnical study was prepared for the existing 600,000 gallon tank, but additional work for the new tank will be required. It is assumed that geotechnical conditions would be similar and the prior investigation costs are the basis for this additional work, estimated to be $25,000. Additionally, project site surveying is required to support the engineering design effort in Task 7. The survey costs are estimated to be $15,000, consistent with a projects of a similar size.

Task 7. Final Design

The anticipated design fees were prepared by Kennedy/Jenks Consultants and are based on experience from similar projects, including the recent Vega Mutual Water Project. The total design fee estimate is $140,000, equivalent to 10% of the construction costs. The costs are further broken down to $95,000 for 60% design, as $45,000 for final design.

Task 8. Environmental Documentation

A CEQA Mitigated Negative Declaration may be required for the construction. The estimated cost to complete this document is estimated to be $22,000 based on similar projects requiring approximately 110 hours at an environmental consultant rate of $200 per hour.

Task 9. Permitting

The only permit required would be an encroachment permit from Monterey County. The estimated cost to secure the permit is $2,000 and includes 20 for a PSMCSD staff person at a rate of $100 per hour.

Budget Category (d): Construction/ Implementation

Task 10. Construction Contracting

The anticipated construction contracting fees were prepared by Kennedy/Jenks Consultants and are based on experience from similar projects, including the recent Vega Mutual Water Project. The total construction contracting fee estimate is $20,000.

Task 11. Construction

The construction costs are based on vendor quotes, cost estimating guide books, and recent project experience. A quote for the wick drain system was received from Hayward Baker Inc. A quote for a welded steel potable water storage tank was received from Speiss Construction Company, Inc. (Exhibit 4.2). Additional costs were estimated using the 2013 RS Means cost estimating guide for civil site construction, and other recent project references. The detailed estimates are provided in Preliminary Engineering Report (Exhibit 7.13) and are summarized in the table below.

Project Component	Construction Cost
Remove and Stockpile Materials	$6,000
Wick Drains	$35,000
Tank Base	$6,000
Sand Layer below Tank	$10,000
Steel Tank	$700,000
Miscellaneous Piping and Valves	$150,000
Miscellaneous Site Work	$60,000
Taxes - Materials	$40,000
Contractor Overhead and Profit	$150,000
Total	**$1,157,000**

Budget Category (e): Environmental Compliance/ Mitigation/ Enhancement (Task 12)

As described in the work plan, the project is site is developed and does not support any habitat or environmental conditions likely to require environmental compliance, mitigation or enhancement. Thus, the project will not require environmental activities during construction. Grant funding is not being requested for this task.

Budget Category (f): Construction Administration (Task 13)

The cost to administer construction of the Critical Water Supply System Improvement Project includes both the Construction Management and Engineering Services During Construction. Both services will be provided by the design engineer Kennedy / Jenks and the costs of providing the service are based on a similar project recently constructed, the Vega Mutual Water Project. The estimated cost is approximately 10% of the construction cost ($120,000). The construction management for the installation of coatings on the welded steel potable water storage tank includes an additional fee of approximately $50,000 to cover the costs of a specialty subconsultant to ensure that the tank coatings are installed in conformance with the project requirements. This cost was included in the construction costs.

Budget Category (g): Other Costs

No costs are included in this category.

Budget Category (h): Construction/ Implementation Contingency

The budget included with this task is based on the engineer's estimate and vendor quotes. The estimated contingency is 20%, resulting in a budget of $243,000, and is consistent with the level of design. This project is relatively straightforward and the risks are well known; thus the agencies are confident in the cost estimate provided.

Project 3 Increased Recycled Water Storage Project

Table 4.4 contains the budget for the Increased Recycled Water Storage Project. The budget is composed of the planning, engineering, design and construction costs for two 1 (one) million gallon recycled water storage tanks to be sited at the existing Watsonville Recycled Water Treatment Facility. The budget is based on the Preliminary Engineering Memorandum (Exhibit 7.17) and 2012 Draft BMP (Exhibit 7.12) prepared by Carollo Engineers.

The total project cost is $6,163,618, the funding request amount is $903,000, and the local match is 85%, as documented in Table 4.4.

Non-state share funds (matching funds) are secured by augmentation fees and delivered water fees collected by Pajaro Valley Water Management Agency (PVWMA) from groundwater pumpers and recycled water users. PVWMA will self-finance the project costs from capital reserves.

Table 4.4: Increased Recycled Water Storage

Proposal Title: Pajaro River Watershed IRWM Implementation Proposal					
Project Title: Increased Recycled Water Storage Project					
Project serves a need of a DAC?			☐ **Yes**	☒ **No**	
Funding Match Waiver Request?			☐ **Yes**	☒ **No**	
		(a)	**(b)**	**(c)**	**(d)**
Category		**Requested Grant Amount**	**Cost Share: Non-State Fund Source***	**Cost Share: Other State Fund Source***	**Total Project Cost**
(a)	**Direct Project Administration**	**$0**	**$103,000**	**$0**	**$103,000**
	Task 1. Administration	$0	$68,000	$0	$68,000
	Task 2. Labor Compliance Program (Task 13.1)	$0	$0	$0	$0
	Task 3. Reporting	$0	$34,000	$0	$34,000
	Task 4. Project Performance Monitoring Plan	$0	$1,000	$0	$1,000
(b)	**Land Purchase/ Easement (Task 5)**	**$0**	**$0**	**$0**	**$0**
(c)	**Planning/Design/Engineering/Environmental**	**$0**	**$604,618**	**$0**	**$604,618**
	Task 6. Assessment and Evaluation				
	Geotechnical Investigation	$0	$25,000	$0	$25,000
	Site Survey	$0	$15,000	$0	$15,000
	Task 7. Final Design				
	Preliminary Design	$0	$49,618	$0	$49,618
	30% Design	$0	$168,000	$0	$168,000
	60% Design	$0	$157,000	$0	$157,000
	90% Design	$0	$139,000	$0	$139,000
	Final Design	$0	$37,000	$0	$37,000
	Bid Package	$0	$14,000	$0	$14,000
	Task 8. Environmental Documentation	$0	$0	$0	$0
	Task 9. Permitting	$0	$0	$0	$0
(d)	**Construction / Implementation**	**$903,000**	**$2,509,000**	**$0**	**$3,412,000**
	Task 10. Construction Contracting	$0	$16,000	$0	$16,000
	Task 11. Construction	$903,000	$2,493,000	$0	$3,396,000
(e)	**Environmental Compliance/Mit./Enhance. (Task 12)**	**$0**	**$0**	**$0**	**$0**
(f)	**Construction Administration (Task 13)**	**$0**	**$366,800**	**$0**	**$366,800**

(g)	**Other Costs**	**$0**	**$0**	**$0**	**$0**
(h)	**Construction/ Imp. Contingency (Task 13)**	**$0**	**$1,677,200**	**$0**	**$1,677,200**
(i)	**Grand Total**	**$903,000**	**$5,260,618**	**$0**	**$6,163,618**
*****The source of the Non-State share is secured by groundwater augmentation fees and delivered water sales revenue.					

Basis of Detailed Budget Cost Estimates

The following sections provide additional detail about the Increased Recylced Water Storage Project category costs identified in Table 4.4.

Budget Category (a): Direct Project Administration

Direct project administration costs in Budget Category (a) are not a part of the requested grant funding and are submitted for consideration as matching funds. Other administrative costs are included within the other budget categories as part of the staff time required to complete the designated work.

Task 1. Administration

Administration for the Increased Recycled Water Storage Project is estimated to be 20 hours per month at an average Pajaro Valley Water Management Agency (PVWMA) staff rate of $100 per hour for the approximate 34 month duration of the project. The project is anticipated to begin in October 2013 and be completed by August 2016. The total cost for Administration is estimated to be $68,000. The majority of administrative work will be completed during the Final design phase of the project. During the construction phase administration will be minimal and associated costs are included in the construction management budget. This estimate is based upon time needed to prepare a project management plan, attend meetings, and prepare monthly progress reports and invoices.

Task 2. Labor Compliance Program

The PVWMA has an existing program in compliance with the labor code and this task involves providing documentation demonstrating compliance. The Construction Manager reviews contractor's payroll submittals for labor compliance with the State labor code. Costs for the Labor Compliance Program are included in the cost estimate for Construction Management in Task 13.1, Construction Administration. No additional expenditures are anticipated under this task.

Task 3. Reporting

This task includes creation of quarterly project reports to be provided to the SBCWD, the grant administrator, that describes the progress and accomplishments for the quarter, the Final Project Completion Report, and the Post Completion Reports (to be submitted annually for ten years of the project's operational life). The estimated cost to prepare the reports is $34,000 and includes 10 hours per month for the 34 month project duration at a PVWMA staff rate of $100 per hour.

Task 4: Project Performance Monitoring Plan (PPMP)

The PPMP will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated as summarized in Attachment 6. The estimated cost to prepare the PPMP is $1,000 and includes 10 hours at a staff rate of $100 per hour. This is based on PPMP costs prepared for similar grant programs for PVWMA.

Budget Category (b): Land Purchase / Easement

All improvements made and facilities constructed for the Increased Recycled Water Storage Project will be constructed on property owned by the City of Watsonville for construction of wastewater and recycled water treatment components. Thus, the project will not require purchase of land or easements. Grant funding is not being requested for this task.

Budget Category (c): Planning/ Design/ Engineering/ Environmental Documentation

The project is currently in the predesign phase. Estimates have been made without detailed engineering data available and as such are subject to fluctuation. The basis for the cost estimate are similar to storage tank projects designed and built in California by the design consultant, Carollo Engineers. Detailed labor hours have been provided for design including pre-design through 100% completion.

Planning, and environmental documentation are completed as described in the Completed Work section of Attachment 3 and are an assumed sunk cost **OR** costs that were incurred after September 30, 2008 are included as the Non-State share (funding match).

Task 6. Assessment and Evaluation

Assessment and evaluation of the project area will include a geotechnical survey that has been completed ($25,000) and a land survey of the proposed project area ($15,000).

Task 7. Final Design

This project includes work to bring the preliminary design of the two storage tanks to 100% design level. Under this task the following subtasks will be completed to bring the design to 100%.

- Preliminary Design
- 30% design
- 60% design
- 90% design
- 100% design and Bid Package

The design estimate has been prepared by the design consultant, Carollo Engineers. Each design stage includes time and materials for preparing the draft submittal, engineering consultant internal review, engineering consultant response to comments and Agency review. The 100 percent package will include construction drawings and specifications representative of a biddable set of construction documents. Specifications will include proposed construction sequencing and constraints, general criteria, installation requirements and testing procedures for major equipment, and listing of proposed bid item breakdown. A bid package will be prepared addressing PVWMA comments from the 100% design submittal package. A detailed breakdown of labor hours needed for completion of the project is included. The submittal package would include the following.

a. Typical details.
b. Site plans
c. Piping and instrumentation diagrams.
d. Piping layout drawings.
e. Building elevations and floor plan (if applicable).
f. Equipment layouts for all major equipment.
g. Electrical single line drawings.
h. Control descriptions.
i. Control system architecture block diagrams (SCADA).
j. Equipment data sheets for all major equipment.
k. Instrument lists.
l. Drawing list.
m. Specification table of contents.
n. Specification sections for major equipment.
o. Draft standard and special provisions.
p. List of specific items requiring CITY decision.
q. Project cost estimate

The estimated design fee, by phase, was developed by the engineer and is presented below.

Design Phase	Fee Estimate
Preliminary Design	$49,618
30% Design	$168,000
60% Design	$157,000
90% Design	$139,000
100% Design	$37,000
Bid Package	$14,000
Total	**$564,618**

Task 8. Environmental Documentation

The environmental documentation requirements for this project were satisfied by the EIR prepared for the Recycled Water Treatment Facility, as described in the Completed Work section. No additional work or costs are associated with this task.

Task 9. Permitting

The permitting requirements for this project were satisfied during the implementation and construction of the Recycled Water Treatment Facility, as described in the Completed Work section. All activities associated with this project will be contained within the fenceline of the existing treatment plant and no additional work or costs are associated with this task.

Budget Category (d): Construction/ Implementation

The project is currently in the predesign phase. As such, a detailed cost estimate including quantity of materials, labor, etc is not available. However, in creating a planning level cost estimate for construction and implementation, projects of similar size constructed in California were examined.

Task 10. Construction Contracting

Costs associated with construction contracting would include preparing Advertisement of bid documents, Bid Period Services, Pre-Bid Meeting, Addenda preparation, and Review of Bids. The total cost of this task is $16,000 based upon approximately 100 hours of consultant staff time at a rate of $160 per hour.

Task 11. Construction

As stated above, the project is currently in the predesign phase. As such a detailed cost estimate with material and equipment quantities is not available. However based on similar projects the following cost estimate was developed:

Project Element	Cost Estimate
Site Work	$600,000
Reservoirs	$2,200,000
Tank Appurtenances	$100,000
Additional Pumps (Vertical turbine pump 350 horsepower)	$100,000
Electrical, instrumentation and controls	$300,000
Landscaping	$27,000
Subtotal	$3,327,000
Sales Tax (8.25% applied to 25% of direct costs)	$69,000
Total	**$3,396,000**

This cost also includes an 8.25% sales tax applied to 25% of the total direct cost. The direct cost includes all of the items mentioned above.

Budget Category (e): Environmental Compliance/ Mitigation/ Enhancement

All activities associated with this project will be contained within the fenceline of the existing treatment plant and no environmental compliance, mitigation or enhancement is required.

Budget Category (f): Construction Administration

Construction administration costs are based on time and materials from construction of similar projects in California. For construction management and ESDC an estimated 14 months were assumed for the duration of construction. A detailed account of the tasks provided under each task is provided below

Task 13.1. Construction Management

Construction management services will be for the assumed duration of the construction project. The Construction Manager would perform the following subtasks:

a. Conduct on-site observation of the work. The CM will report observed deviations in writing to the contractor and monitor the contractor's corrective action.
b. Observe tests, equipment, and system start-up performed by contractor.
c. Attend weekly progress meetings and prepare meeting minutes.
d. Review schedules.

e. Serve as liaison between design team and contractor, and serve as liaison between Agency and contractor.
f. Attend walk-through at the project site with prior to final inspection.
g. Forward RFIs, questions, and other documentation provided by contactor to the design team.
h. Maintain orderly records, keep a log for days visiting site, and furnish periodic reports to the design team of the progress of the work.
i. Report to the design team when clarifications and interpretations of the Contract Documents are needed. Consider, evaluate, and report to the consultant, contractor's requests for modifications.
j. Assist with CO requests.
k. Review the contractor's monthly requests for payment and provide a recommendation to the Agency regarding payment.
l. Coordinate with the Agency's material testing and soils testing firm and welding inspector regarding the timing and number of samples to be collected and tested.
m. Witness the contractor's testing of new equipment.
n. Assist with administration of the punch list.
o. It is assumed for budgeting purposes that the CM will be on-site approximately 50 percent time for the project duration.

The total estimated construction management cost is based on a total of 830 hours at an average consultant rate of $160 per hour for a total of $132,800.

Task 13.2. Engineering Services During Construction (ESDC)

Costs associated for ESDC include time and materials for completing the following tasks:

a. Prepare Conformed Plans and Specs
b. Pre-Construction Conference
c. Engineer Site Visits and Progress Meetings
d. Response to RFIs
e. Shop Drawings Review
f. Review and Preparation of Change Orders
g. Prepare "Punch List"

The total estimated engineering services during construction cost is based on a total of 1,300 hours at an average consultant rate of $180 per hour for a total of $234,000.

Budget Category (g): Other Costs

No costs are included in this category.

Budget Category (h): Construction/ Implementation Contingency

Contingencies have been added to the construction portion of the project. A 15% contingency has been added to account for the contractors home office overhead and profit. An additional 20% construction contingency has been added to account for change orders during construction. Due to the preliminary phase of design that the project is at, a higher level of contingency is needed than if the project were at the 60% or 90% design level.

Project 4 Pajaro Agricultural Water Quality and Aquifer Enhancement Project

Table 4.5 contains the budget for the Pajaro Agricultural Water Quality and Aquifer Enhancement Project. The budget is composed of the planning, engineering, design and construction costs for four program elements:

- Support the Community Water Dialogue to lead grower-based programs for improved water management;
- Construct two managed aquifer recharge (Lower Pajaro);
- Develop and implement cost-share and performance-based incentives for water quality and water supply; and
- Provide a Regional Mobile Lab to provide technical and outreach services to promote improved irrigation efficiency.

The total project cost is $495,000, the funding request amount is $425,000, and the eligible local match is 14%, as documented in Table 4.5. Non-State matchning funds are from the Santa Clara Valley Water District Irrigation Program (LPRCD).

Table 4.5: Project Budget for the Pajaro Agricultural Water Quality and Aquifer Enhancement Project

Proposal Title: Pajaro River Watershed IRWM Implementation Proposal					
Project Title: Pajaro Agricultural Water Quality and Aquifer Enhancement Project					
Project serves a need of a DAC?			☐ **Yes**	☒ **No**	
Funding Match Waiver Request?			☐ **Yes**	☒ **No**	
		(a)	**(b)**	**(c)**	**(d)**
Category		**Requested Grant Amount**	**Cost Share: Non-State Fund Source***	**Cost Share: Other State Fund Source***	**Total Project Cost**
(a)	**Direct Project Administration**	**$8,700**	**$0**	**$0**	**$8,700**
	Task 1. Administration	$4,320	$0	$0	$4,320
	Task 2. Labor Compliance Program (Task 13.1)	$0	$0	$0	$0
	Task 3. Reporting	$3,100	$0	$0	$3,100
	Task 4. Project Performance Monitoring Plan	$1,280	$0	$0	$1,280
(b)	**Land Purchase/ Easement (Task 5)**	**$0**	**$0**	**$0**	**$0**
(c)	**Planning/Design/Engineering/Environmental**	**$63,888**	**$0**	**$0**	**$63,888**
	Task 6. Assessment and Evaluation	$8,868	$0	$0	$8,868
	Task 7. Final Design	$42,720	$0	$0	$42,720
	Task 8. Environmental Documentation	$2,460	$0	$0	$2,460
	Task 9. Permitting	$9,840	$0	$0	$9,840
(d)	**Construction / Implementation**	**$337,223**	**$70,000**	**$0**	**$407,223**
	Task 10. Construction Contraction	$5,200	$0	$0	$5,200
	Subtask 11.1 Community Water Dialogue	$16,260	$0	$0	$16,260
	Subtask 11.2 Managed Aquifer Recharge	$139,630	$0	$0	$139,630
	Subtask 11.3 Cost Share and Performance Incentives	$9,813	$0	$0	$9,813
	Subtask 11.4 Regional Mobile Lab	$166,320	$70,000	$0	$236,320
(e)	**Environmental Compliance/Mitigation/Enhance.**	**$6,930**	**$0**	**$0**	**$6,930**
(f)	**Construction Administration**	**$8,259**	**$0**	**$0**	**$8,259**
	Construction Management	$5,760	$0	$0	$5,760
	Engineering Services During Construction	$2,499	$0	$0	$2,499
(g)	**Other Costs**	**$0**	**$0**	**$0**	**$0**

(h)	**Construction/ Imp. Contingency**	**$0**	**$0**	**$0**	**$0**
(i)	**Grand Total**	**$425,000**	**$70,000**	**$0**	**$495,000**

****List sources of funding (for Non-State Share AND Other State Fund Share):**
The funding match comes from the Santa Clara Valley Water District Irrigation Program (LPRCD)

Basis of Detailed Budget Cost Estimates

The following sections provide additional detail about the additional detail about the Pajaro Agricultural Water Quality and Aquifer Enhancement Project category costs identified in Table 4.5.

Budget Category (a): Direct Project Administration

Task 1. Administration

Administration for the Pajaro Agricultural Water Quality and Aquifer Enhancement Project is estimated to be approximately 1.5 hours per month at a Resource Conservation District of Santa Cruz County (RCDSCC) staff rate of $80 per hour for the 36 month duration of the project (based on prior experience). The project is anticipated to begin in October 2013 and be completed by October 2016. The total cost for Administration is estimated to be $4,320 and equates to approximately 1% of the estimated total project costs.

Task 2. Labor Compliance Program

The RCDSCC has an existing Labor Compliance Program consistent with subdivision (b) of Labor Code Section 1771.5. The Construction Manager reviews contractor's payroll submittals for labor compliance with the State labor code. Costs for the Labor Compliance Program are included in the cost estimate for Construction Management in Task 13. Construction Management (Managed Aquifer Recharge)

Task 3. Reporting

This task includes creation of quarterly project reports, and Final Project Completion Report. Assessment of the project schedule and budget, and updated schedules and budgets, if appropriate, will also be included. The estimated cost to prepare the reports is approximately 3 hours per quarter at a staff rate of $80 per hour for the 36 month duration of the project (12 quarters; based on past experience). The total budget for this task is $3,100.

Task 4: Project Performance Monitoring Plan (PPMP)

The PPMP will be prepared at the initiation of implementation to outline how the project performance will be assessed and evaluated as summarized in Attachment 6. The estimated cost to prepare the PPMP is estimated at 16 hours at a staff rate of $80 per hour (based on past experience) for a total of $1,280.

Budget Category (b): Land Purchase / Easement (Task 5)

There is no land purchase or easement requirement for this project.

Budget Category (c): Planning/ Design/ Engineering/ Environmental Documentation

Task 6. Assessment and Evaluation

Prior to implementing design and construction of the two managed aquifer recharge basins, the RCDSCC will collect and synthesize relevant hydrological data from potential field sites to evaluate sites for managed aquifer recharge basin implementation. The estimated cost to assess

and evaluate sites for managed aquifer recharge is $6,986 and includes 87 hours at a staff rate of $80 per hour as well as technical consultant time at approximately 0.5 hours per month for 36 months at a rate of $107 per hour for a total of $1,882. These costs are broken down by subtask below.

Subtask 6.1 Development of Financing
Approximately 22 hours for staff at a rate of $80 per hour for a total of $1,760.

Subtask 6.2 Conduct percolation testing in potential recharge zones that have been mapped under prior efforts
Approximately 22 hours for staff at a rate of $80 per hour for a total of $1,760, as well as technical consultant time at approximately 0.5 hours per month for 36 months at a rate of $107 per hour for a total of $1,882.

Subtask 6.3 Provide outreach to landowners
Approximately 1 to 2 hours per month for staff at a rate of $80 per hour for a total of $3,466.

Task 7. Final Design

The RCDSCC will contract with an engineer or utilize the design services of USDA NRCS to construct two managed aquifer recharge basins. Work toward the deliverables of 60% and 100% designs will be completed as part of the requested funding. To complete this task it is estimated 76 hours of staff time will be needed at a rate of $80 for a total of $6,080. In addition, the technical consultant will assist staff with this task for a total of 24 hours at a rate of $110 for a total of $2,640. An additional $34,000 has been allocated for contracting with an engineer to complete the designs for two ponds (approximately $17,000 each, based on pilot project costs).

Task 8. Environmental Documentation

The RCDSCC will utilize the Partners in Restoration (PIR) Permit Coordination Program to permit the construction of two managed aquifer recharge basins. As part of this program, CEQA/NEPA is complete for the approved practices (recharge basins). Funding is being requested for staff time and assistance from the technical consultant to prepare the annual permit application and agency coordination for two managed aquifer basins. To complete this task it is estimated 10 hours of staff time will be needed at a rate of $80 for a total of $800. In addition, the technical consultant will assist staff with this task for a total of 6 hours at a rate of $110 for a total of $660. An additional $500 per pond for a total of $1000 has been added for permit fees.

Task 9. Permitting

The RCDSCC will utilize the PIR Permit Coordination Program to permit the construction of two managed aquifer recharge basins. As part of this program the following permits are complete: Master Permit for Santa Cruz County, 401 Certification from RWQCB, Regional General Permit from Army Corps of Engineers, Biological Opinion from US fish and Wildlife Service. The permits listed above are complete for approved practices under the Permit Coordination Program (i.e. recharge basins). Funding is being requested for staff time and assistance from the technical consultant to prepare the annual permit application and agency coordination for two managed aquifer basins. To complete this task it is estimated 44 hours of staff time will be needed at a rate of $80 for a total of $3,520. In addition, the technical

consultant will assist staff with this task for a total of 12 hours at a rate of $110 for a total of $1,320. An additional $5,000 has been allocated for permit fees.

Budget Category (d): Construction/ Implementation

Task 10. Construction Contracting

The RCDSCC will complete construction contracting for the Managed Aquifer Recharge projects as well as implementation associated with the Regional Mobile Lab. Staff time to complete this task is estimated at 65 hours at a rate $80 for a total of $5,200.

Task 11. Construction

Implementation under this task is comprised of four subtasks:

- Subtask 11.1 Community Water Dialogue
- Subtask 11.2 Managed Aquifer Recharge
- Subtask 11.3 Cost-share and performance-based incentives for water quality and water supply, and
- Subtask 11.4 Regional Mobile Lab.

Subtask 11.1. Community Water Dialogue

The RCDSCC will support and expand efforts of the Community Water Dialog to inform and lead grower-based efforts for irrigation and nutrient management. Staff time to manage and participate in quarterly and workgroup meetings is approximately 4 hours per meeting for 18 meetings over the term (October 2013 to October 2016) for a total of 72 hours at a rate of $80. Additional staff time of approximately 90 hours at a rate of $80 will be used to communicate to stakeholders through website, email, etc., and conduct surveys to gage the extent to which Community Water Dialogue Programs have led to water conservation benefits. RCD staff time totals $12,960 for this subtask. In addition the technical consultant in estimated to spend approximately 30 hours at a rate of $110 participating in the afore mentioned meetings and assisting staff with outreach activities for a total of $3,300.

Task 11.2. Managed Aquifer Recharge: Implementation of a minimum of two aquifer recharge ponds

The RCDSCC will oversee all implementation activities associated with implementation of aquifer recharge basins including: preparing and advertising bid documents; pre-bid contractors meeting; bid walk; evaluation of bids; award contract; construction oversight, documentation and overseeing permit compliance. It is estimated that approximately 200 hours in staff time will be spent on overseeing these activities at a rate of $80 for a total of $16,000 (based on past experience implementing the pilot project and similar projects). In addition, the technical consultant will spend 33 hours at a rate of $110 assisting with these activities for a total of $3,630 (based on past experience implementing the pilot project and similar projects). Lastly, $120,000 has been set aside for the construction of two recharge ponds. This equates to $60,000 per pond (based on cost of implementing the pilot project and similar projects). The total for this subtask, including all of the above is $139,630.

Subtask 11.3 Cost share and performance based incentives for water quality and water supply

To facilitate implementation of water conservation and water quality enhancement practices, the RCDSCC will develop and direct incentive programs to participating landowners. It is estimated that approximately three to four hours of staff time per month from October 2013 to October 2016 at a rate of $80 will be spent on this subtask. Total staff time spent is estimated to be $7,833. In addition, the technical consultant will spend approximately 0.5 hours per month at a rate of $110 on these activities as well assisting staff for a total of $1,980.

Subtask 11.4 Regional Mobile Lab

The RCDSCC will coordinate with the Central Coast Agricultural Water Quality Coalition and regional MIL technical experts to provide technical assistance to growers in the Lower Pajaro. Costs for this task include on average 10 hours per month in staff time at a rate of $80 for a total of $28,880. In addition, it is estimated that the technical consultant will spend approximately one to two hours per month at a rate of $110 assisting the RCD with this task for a total of $5,940. Furthermore, $1,500 will be spent to assist with implementation of nitrate quick tests in partnership with Loma Prieta RCD. This equates to $50 per test for 30 growers. Furthermore, $45,000 will be spent on flow meters ($1500/each x 30 growers), $45,000 to complete Distribution Uniformity evaluations ($1500/each x 30 growers), $15,000 for follow-up with growers ($500/each x 30 growers), and additional $25,000 will be used to provide cost-share assistance to growers to implement irrigation and nutrient management system upgrades (approximately $800 per grower x 30 growers).

$70,000 in non-state match is being provided by a contract between the Santa Clara Valley Water District and the Loma Prieta Resource Conservation District. This contract is to provide ten growers in Santa Clara Valley with irrigation and nutrient management.

Budget Category (e): Environmental Compliance/ Mitigation/ Enhancement

Task 12. Environmental Compliance/Enhancement/Monitoring

This task is in associated with the Managed Aquifer Recharge construction task (11.2). Site appropriate methods of erosion control will be used to revegetate Managed Aquifer Recharge sites after construction. 16 hours of staff time at a rate of $80 for a total of $1,280. In addition the technical consultant will spend approximately 7 hours at a rate of $110 assisting staff on this task for a total of $770. Ongoing monitoring and sampling of operating systems, allowing near-real-time assessment of flows, solute and sediment loads, etc. will be collected to quantify total increase in recharge. 39 hour of staff time at a rate of $80 for a total of $3,120. In addition the technical consultant will spend approximately 16 hours at a rate of $110 assisting staff on this task for a total of $1,760. The total for this task is $6,930.

Budget Category (f): Construction Administration

Task 13. Construction Administration

This task is in associated with the Managed Aquifer Recharge task (11.2). This task includes the following two subtasks: 13.1 Construction Management and 13.2 Engineering Services During Construction (ESDC).

Subtask 13.1 Construction Management (Managed Aquifer Recharge)
Construction Management will occur for the duration of the construction period. The RCDSCC will be responsible for development, negotiation and securing all contracts, including construction contractors, construction managers, and environmental monitoring consultants. 39 hours of staff time at a rate of $80 for a total of $3,120. In addition the technical consultant will spend approximately 24 hours at a rate of $110 assisting staff on this task for a total of $2,499.

Task 13.2. Engineering Services During Construction (ESDC) (Managed Aquifer Recharge)
Engineering services will be contracted with the design engineering firm and/or the Natural Resource Conservation Service (NRCS). 16 hours of staff time at a rate of $80 for a total of $1,280. In addition the technical consultant will spend approximately 11 hours at a rate of $110 assisting staff on this task for a total of $1,210.

Budget Category (g): Other Costs

There are no other costs for this project.

Budget Category (h): Construction/ Implementation Contingency

There are no construction or implementation contingency costs for this project.

Pajaro River Watershed IRWM Grant Administration

The budget for the Pajaro River Watershed IRWM Grant Administration is based on the scope and fee of similar grant administration activities for the Pajaro River Watershed. The grant administration activities and associated budget for the term of the agreement are detailed below. The assumed rate is $200 per hour for consultant services for the term of the grant (October 2013 through April 2017). All grant administration costs are submitted as grant reimbursable.

Administration Task	Hours	Fee Estimate
Grant Agreements	200	$40,000
Quarterly Report Coordination	600	$120,000
Grant Invoice Submittals	600	$120,000
Project Completion Report Coordination	100	$20,000
Grant Completion Report	100	$20,000
General Grant Coordination	245	$49,000
Total	**1845**	**$369,000**

EXHIBIT 4.1

HUA WATER PROJECT ENGINEER'S ESTIMATES

	RIDGEMARK TRANSMISSION PIPELINE PROJECT (Fairview Road)			
	Engineer's Estimate Of Probable Costs (Updated 9/25/2012 by Ken Girouard)			
Item	Description	Qty.	$/Units	Subtotal
1	Mobilization & Demobilization	1	$30,000.00	$30,000.00
2	Encroachment Permit With Traffic Control Plan	1	$35,000.00	$35,000.00
3	Sheeting, Shoring, and Bracing	1	$10,000.00	$10,000.00
4	16" Corrosion Resistant Ductile Iron Pipe (Detail 1)	80	$210.00	$16,800.00
5	12" Gate Valve (Including G-5 Traffic Box)	4	$4,000.00	$16,000.00
6	16" Gate Valve (Including G-12 Traffic Box)	6	$11,000.00	$66,000.00
7	16" Non-Restrained C-905, DR 18 PVC Pipe (Detail B)	850	$190.00	$161,500.00
8	16" Non-Restrained C-905, DR 18 PVC Pipe (Detail D)	453	$190.00	$86,070.00
9	16" Non-Restrained C-905, DR 18 PVC Pipe (Detail C)	472	$190.00	$89,680.00
10	16" Non-Restrained C-905, DR 18 PVC Pipe (Detail D)	1530	$190.00	$290,700.00
11	16" Restrained C-905, DR 18 PVC Pipe	600	$250.00	$150,000.00
12	2" Combination A.R.V. Assembly	2	$3,000.00	$6,000.00
13	2" Domestic Water Service	1	$6,000.00	$6,000.00
14	Hydrostatic Pressure Testing	1	$5,000.00	$5,000.00
15	Disinfection, Flushing and Bac-T Testing	1	$5,500.00	$5,500.00
16	Connect New & Existing Pipelines	1	$12,000.00	$12,000.00
	Construction Total			$986,250.00
	Inspection & Administration by			$98,625.00
	Grand Total			$1,084,875.00

West Hills Water Treatment Plant

Engineer's Estimate of Probable Cost

Updated March 1, 2013, By Bob Ellis, HDR

Item	Description		Estimated Cost
1	Field General Conditions	$	959,378
2	Sitework and Yard Piping	$	1,113,103
3	Raw Water Pump Station	$	494,058
4	Raw Water Pipeline	$	958,048
5	Actiflo/Carb	$	1,554,115
6	Gravity Filters (Concrete)	$	860,000
7	Treated Water Storage Tank	$	541,500
8	Treated Water Pipeline	$	2,060,715
9	Backwash Supply Pump Station	$	33,684
10	WWR basin	$	144,221
13	Return Water Pump Station	$	33,684
14	Solids Lagoons Pump Station	$	33,684
15	Solids Lagoons	$	384,083
16	Decant Pump Station	$	33,684
17	Chemical Feed Facility	$	592,529
18	PAC System	$	501,265
19	Operations Building	$	542,952
20	I&C	$	589,485
21	Electrical	$	1,031,599
22	Sales Tax (9.25%)	$	540,120
23	Contractors Fee (10%)	$	1,270,189
24	Bonds and Insurance (1.5%)	$	190,528
25	Contingency (20%)	$	2,540,378
26	Escalation	$	290,000
	Total Construction Cost	**$**	**17,293,000**
	Inspection & Administration	$	1,729,300

Notes:

Costs have been updated from the 2012 Preliminary Design Report to reflect an initial capacity of 4.5 mgd

Kennedy/Jenks Consultants

Engineers & Scientists

303 Second Street, Suite 300 South
San Francisco, California 94107
415-243-2150
FAX: 415-896-0999

9 January 2013

Mr. Harry Blohm, Program Manager
Hollister Urban Area Master Plan Implementation Program
c/o Hollister Water Treatment Agency
3570 Airline Highway
Hollister, California 95023

Subject: 95-Percent Level Engineer's Opinion of Probable Cost
Lessalt WTP DBP Reduction Improvements Project
K/J 1068012*02

Dear Mr. Blohm:

Kennedy/Jenks is submitting the 95-percent design level Engineer's opinion of probable construction cost (95-Percent Cost Estimate) for the Hollister Water Treatment Agency (HWTA) Lessalt Water Treatment Plant (WTP) Disinfection Byproducts (DBP) Reduction Improvement Project. The 95-Percent Cost Estimate was developed based on the project 95-percent level design drawings and specifications.

The cost estimate is presented in Construction Standards Institute (CSI) format by division. Division 2 through 17 materials and installation costs were developed from the design elements shown (and anticipated to be shown) on the drawings and specifications. Division 1 project administrative and mobilization costs are included as a markup on the Division 2 through 17 subtotal. The first page of the cost estimate provides a summary by division, and the remaining pages show the detailed elements within each division.

Major equipment costs are based on quotes from the listed manufactures in the specifications. Standard cost estimating guidelines and engineering experience were used to develop the unit costs for piping and other system costs. Cost estimates presented at a 95-percent design level are considered to represent a Class 1 estimate. An estimate contingency of 8 percent, reflecting what is typically used with a Class 1 estimate, was applied to the opinion of probable construction cost. The cost estimate also includes markups for taxes on materials of 8.25 percent, an 8 percent markup for Division 1 contractual conditions, and a 12 percent markup for general contractor overhead and profit. The costs are also escalated to the mid-point of construction using a 1-percent markup.

Overview of 95-Percent Cost Estimate

The Lessalt WTP DBP Reduction Project, 95-percent level Engineer's opinion of probable construction cost is $5,990,000, or approximately $6M. This cost estimate is in line with the expected project cost range that was developed from the Value Engineering process at the 50-percent design level.

The Kennedy/Jenks Team is committed to meeting your goals for the Lessalt WTP DBP Reduction Project and looks forward to continuing to work with you on this important project. If you have any questions regarding the attached 95-Percent Cost Estimate or the status of the project, please call Todd Reynolds at (415) 243-2453, or Deborah Cohen at (415) 243-2528.

Very truly yours,

KENNEDY/JENKS CONSULTANTS

Todd Reynolds
Project Manager

Enclosure: 95-Percent Level Engineer's Opinion of Probable Construction Cost, Lessalt WTP DBP Improvements Project

OPINION OF PROBABLE CONSTRUCTION COST | **KENNEDY/JENKS CONSULTANTS**

Project: Lessalt WTP DBP Reduction Improvements

Building:

Prepared By: ANK/SBE/DEC/SMA/CCL/AOR
Date Prepared: 9-Jan-13
K/J Proj. No.: 1068012*02

Estimate Type:
- [ ] Conceptual
- [ ] Preliminary (w/o plans)
- [X] Design Development @ 95 % Complete
- [ ] Construction
- [ ] Change Order

Current at ENR 10,367
Escalated to ENR
Mos. to Midpoint 10

SUMMARY BY DIVISION

DIV. No.	ITEM DESCRIPTION	MATERIALS	INSTALLATION	SUB-CONTRACTOR	TOTAL
2	Site Work	273,000	285,000		558,000
3	Concrete	39,000	56,000		95,000
5	Metals	32,000	16,000		48,000
9	Finishes	37,000	27,000		64,000
10	Specialties	1,000	1,000		2,000
11	Equipment	1,523,000	470,000		1,993,000
13	Special Construction	217,000	87,000		304,000
15	Mechanical	481,000	164,000		645,000
16	Electrical	310,000	84,000		394,000
17	Instrumentation	146,000	44,000		190,000
	Subtotals	3,059,000	1,234,000		4,293,000
	Division 1 Costs @ 8%	245,000	99,000		344,000
	Subtotals	3,304,000	1,333,000		4,637,000
	Taxes - Materials @ 8.25%	273,000			273,000
	Subtotals	3,577,000	1,333,000		4,910,000
	Contractor OH&P @ 12%	429,000	160,000		589,000
	Subtotals	4,006,000	1,493,000		5,499,000
	Estimate Contingency @ 8%				440,000
	Subtotal				5,939,000
	Escalate to Midpt of Const. @ 1%				49,000
	Estimated Bid Price				5,988,000
	Total Estimate (Rounded)				5,990,000

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ANK/SBE/DEC/
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Spec. No.	Item No.	Description	Qty	Units	Materials $/Unit	Materials Total	Installation $/Unit	Installation Total	Sub-contractor $/Unit	Sub-contractor Total	Total
DIVISION 2 - SITE WORK											
		Demolition									
		Fence Demolition	970	LF			7	6,790			6,790
		Pipe Demolition	1	LS			2,000	2,000			2,000
		AC Pavement Demolition	680	SY			9	6,120			6,120
		Concrete Pad Demolition	50	SY			25	1,250			1,250
		Demo (E) Meter Cabinet	1	LS			1,000	1,000			1,000
		Grading and Drainage									
		Grading	1,700	CY			7	11,900			11,900
		Concrete V-Gutter	95	LF	10	950	10	950			1,900
		Storm Drain - Dispersion Trench	230	LF	15	3,450	10	2,300			5,750
		Paving									
		Base Course - 4" White Drain Rock	595	SY	12	7,140	6	3,570			10,710
		Base Course - 9" Class 2	1,060	SY	12	12,720	6	6,360			19,080
		Base Course - 12" Class 2	1,180	SY	12	14,160	9	10,620			24,780
		Asphalt Paving - 3"	1,060	SY	9	9,540	4.50	4,770			14,310
		Structures and Misc									
		Chain Link Fences & Gates	840	LF	10	8,400	8.50	7,140			15,540
		Concrete Retaining Wall	300	LF	150	45,000	150	45,000			90,000
		Sanitary Manhole	1	EA	1,500	1,500	2,200	2,200			3,700
		Drain Water Collection Box	1	EA	4,000	4,000	4,000	4,000			8,000
		Catch Basins	4	EA	2,000	8,000	2,000	8,000			16,000
		Bollards	14	EA	100	1,400	100	1,400			2,800
		Yard Piping									
		Sanitary Sewer Line	80	LF	12	960	40	3,200			4,160
		SD Pipeline (4")	60	LF	30	1,800	30	1,800			3,600
		24" SW	215	LF	180	38,700	180	38,700			77,400
		16" SW	30	LF	120	3,600	120	3,600			7,200
		14" GFW	140	LF	105	14,700	105	14,700			29,400
		16" WWS	260	LF	120	31,200	120	31,200			62,400
		12" TW	140	LF	90	12,600	90	12,600			25,200
		6" SWW (at WTP)	435	LF	45	19,575	45	19,575			39,150
		6" SWS	80	LF	45	3,600	45	3,600			7,200
		6" DR	145	LF	45	6,525	45	6,525			13,050
		Chemical Piping (Double Contained)	1	LS	3,000	3,000	3,000	3,000			6,000
		Sample Piping	1	LS	3,000	3,000	3,000	3,000			6,000
		Plant Water Piping, Valves and Accessories	1	LS	2,500	2,500	2,500	2,500			5,000
		Reroute 3" D	1	LS	1,500	1,500	1,500	1,500			3,000
		Connections to Existing									
		14" SW Connections	2	EA	1,000	2,000	1,000	2,000			4,000
		12" TW Connections	3	EA	1,000	3,000	1,000	3,000			6,000
		12" GFW Connection (above grade)	1	EA	1,000	1,000	750	750			1,750
		6" SWW Connection	1	EA	1,000	1,000	1,000	1,000			2,000
		6" SS Connection (at existing MH)	1	EA	1,000	1,000	2,000	2,000			3,000
		2" PW Connection	1	EA	250	250	250	250			500
		Structural Subgrade Prep and Excavation									
		TW/WWS Pumpstation	95	SY	9	855	9	855			1,710
		Electrical Station	35	SY	9	315	9	315			630
		Coagulant Storage	40	SY	9	360	9	360			720
		SWW and Surface WW Booster Pump Station	30	SY	9	270	9	270			540
		TW Tank Footing	150	SY	9	1,350	9	1,350			2,700
		SWW Tank Footing	75	SY	9	675	9	675			1,350
		GAC/GRF Filter Footings	100	SY	9	900	9	900			1,800
		Drain Water Collection Box	20	SY	9	180	9	180			360
DIVISION 3 - CONCRETE											
		TW/WWS Pumpstation	27	CY	150	4,050	250	6,750			10,800
		Electrical Station	19	CY	150	2,850	250	4,750			7,600
		Coagulant Containment	26	CY	175	4,550	275	7,150			11,700
		SWW and Surface WW Booster Pump Station	8	CY	150	1,200	250	2,000			3,200
		TW Tank Footing	36	CY	200	7,200	300	10,800			18,000
		SWW Tank Footing	23	CY	200	4,600	300	6,900			11,500
		GAC/GRF Filter Footings	55	CY	200	11,000	300	16,500			27,500
		Waterstops	122	LF	25	3,050	10	1,220			4,270
DIVISION 5 - METALS											
		Pipe Supports	1	LS	32,000	32,000	16,000	16,000			48,000

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DIVISION 9 - FINISHES											
		Protective Coating - Piping	1	LS	15,000	15,000	5,000	5,000			20,000
		Painting - GAC Filters	3	EA	2,000	6,000	2,000	6,000			12,000
		Painting - Greensand Roughing Filters	3	EA	1,500	4,500	1,500	4,500			9,000
		Painting - Pumps	11	EA	1,000	11,000	1,000	11,000			22,000
		Painting - WS Tanks (included in tank cost)									
DIVISION 10 - IDENTIFYING DEVICES											
		Signage	1	LS	1,000	1,000	1,000	1,000			2,000
DIVISION 11 - EQUIPMENT											
		Greensand Roughing Filters	2	EA	235,000	470,000	70,000	140,000			610,000
		GAC Adsorbers/Filters	3	EA	274,000	822,000	94,200	282,600			1,104,600
		HP Zone TW Pumps	3	EA	22,000	66,000	4,400	13,200			79,200
		MP Zone TW Pumps	3	EA	14,000	42,000	2,800	8,400			50,400
		WW Supply Pumps	3	EA	17,000	51,000	3,400	10,200			61,200
		Spent WW Pumps	2	EA	17,000	34,000	3,400	6,800			40,800
		Surface WW Booster Pumps	2	EA	13,000	26,000	2,600	5,200			31,200
		Coagulant (ACH) Metering Duplex Pump Skid	1	EA	5,700	5,700	1,140	1,140			6,840
		Permanganate Metering Duplex Pump Skid	1	EA	5,252	5,252	1,050	1,050			6,302
		Hypochlorite Metering Pump	1	EA	1,420	1,420	1,000	1,000			2,420
DIVISION 13 - SPECIAL CONSTRUCTION											
		SWW Tank	1	EA	75,000	75,000	30,000	30,000			105,000
		TW Tank	1	EA	121,000	121,000	52,000	52,000			173,000
		Coagulant Storage Tank	1	EA	15,000	15,000	3,750	3,750			18,750
		Permanganate Storage Tank	1	EA	5,500	5,500	1,375	1,375			6,875
DIVISION 15 - MECHANICAL											
		Source Water Piping									
		16" DI Pipe	1	EA	220	220	110	110			330
		16" FCA	1	EA	1,300	1,300	390	390			1,690
		14" DI Pipe	1	EA	180	180	90	90			270
		14" DI 90 Degree Elbow	1	EA	1,350	1,350	250	250			1,600
		14" DI Tee	1	EA	2,800	2,800	275	275			3,075
		14" x 12" DI Reducer	1	EA	1,370	1,370	250	250			1,620
		14" BFV (Manual)	1	EA	2,700	2,700	810	810			3,510
		14" BFV (Air Actuated)	1	EA	8,000	8,000	2,400	2,400			10,400
		14" Check Valve	1	EA	10,000	10,000	2,000	2,000			12,000
		12" DI Pipe	1	EA	140	140	70	70			210
		12" DI 90 Degree Elbow	1	EA	800	800	200	200			1,000
		Static Mixer	1	EA	7,500	7,500	1,500	1,500			9,000
		Greensand Roughing Filters									
		14" DI Pipe	45	LF	180	8,100	90	4,050			12,150
		14" DI 90 Degree Elbow	6	EA	1,350	8,100	250	1,500			9,600
		14"x 12" DI Tee	2	EA	2,200	4,400	275	550			4,950
		14" x 8" Cross	2	EA	2,200	4,400	275	550			4,950
		14" Expansion Joint	2	EA	1,000	2,000	210	420			2,420
		12" DI Pipe	20	LF	140	2,800	70	1,400			4,200
		12" DI 90 Degree Elbow	2	EA	800	1,600	200	400			2,000
		12" x 8" DI Reducing Elbow	2	EA	640	1,280	200	400			1,680
		8" DI Pipe	10	LF	70	700	35	350			1,050
		8" x 6" DI Reducing Elbow	2	EA	320	640	150	300			940
		8" FCA	2	EA	280	560	150	300			860
		6" DI Pipe	40	LF	50	2,000	25	1,000			3,000
		6" DI 90 Degree Elbow	2	EA	170	340	80	160			500
		6" Expansion Joint	2	EA	600	1,200	150	300			1,500
		Motorized BFVs (included in filter equipment cost)									
		GAC Adsorbers/Filters									
		14" DI Pipe	60	LF	180	10,800	90	5,400			16,200
		14" DI 90 Degree Elbow	9	EA	1,350	12,150	250	2,250			14,400
		14" x 8" DI Tee	3	EA	2,030	6,090	275	825			6,915
		14" x 8" DI Cross	3	EA	2,210	6,630	275	825			7,455
		14" Rubber Expansion Joint	3	EA	1,050	3,150	210	630			3,780
		8" DI Pipe	40	LF	70	2,800	35	1,400			4,200
		8" DI 90 Degree Elbow	6	EA	300	1,800	150	900			2,700
		8" DI Tee	6	EA	570	3,420	175	1,050			4,470
		8" x 6" Reducing Elbow	6	EA	320	1,920	150	900			2,820
		8" FCA	3	EA	280	840	150	450			1,290
		6" DI Pipe	75	LF	50	3,750	25	1,875			5,625
		6" DI 90 Degree Elbow	3	EA	170	510	100	300			810
		6" Expansion Joint	3	EA	600	1,800	150	450			2,250
		4" DI Pipe	60	LF	40	2,400	20	1,200			3,600
		4" DI 90 Degree Elbow	12	EA	110	1,320	85	1,020			2,340

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Spec. No.	Item No.	Description	Qty	Units	Materials $/Unit	Materials Total	Installation $/Unit	Installation Total	Sub-contractor $/Unit	Sub-contractor Total	Total
DIVISION 15 - MECHANICAL - Continued											
		4" DI 90 Degree Long Radius Elbow	6	EA	160	960	85	510			1,470
		4" DI 45 Degree Elbow	12	EA	100	1,200	85	1,020			2,220
		4" DI Wye	12	EA	260	3,120	85	1,020			4,140
		4" DI Blind Flange	3	EA	50	150	85	255			405
		4" Camlock Fittings	6	EA	130	780	85	510			1,290
		4" Plug Valves	6	EA	600	3,600	120	720			4,320
		Motorized BFVs (included in filter equipment cost)									
		Filter Area Buried Piping									
		16" DI Pipe	135	LF	90	12,150	70	9,450			21,600
		16" x 14" DI Tee	5	EA	2,710	13,550	400	2,000			15,550
		16" x 12" DI Tee	2	EA	2,580	5,160	400	800			5,960
		16" x 8" DI Tee	6	EA	2,380	14,280	400	2,400			16,680
		16" x 14" DI Reducing Elbow	1	EA	1,450	1,450	375	375			1,825
		16" x 12" DI Reducer	2	EA	1,000	2,000	375	750			2,750
		16" Blind Flange/Cap	3	EA	340	1,020	85	255			1,275
		14" DI Pipe	80	LF	70	5,600	50	4,000			9,600
		14" DI 90 Degree Elbow	2	EA	710	1,420	300	600			2,020
		14" x 14" Tee	4	EA	1,040	4,160	325	1,300			5,460
		12" DI Pipe	35	LF	60	2,100	43	1,505			3,605
		12" 90 Degree Elbow	10	EA	1,040	10,400	250	2,500			12,900
		8" DI Pipe	15	LF	40	600	30	450			1,050
		8" DI 90 Degree Elbow	12	EA	550	6,600	200	2,400			9,000
		6" DI Pipe	300	LF	30	9,000	20	6,000			15,000
		6" DI 90 Degree Elbow	25	EA	310	7,750	150	3,750			11,500
		6" DI Tee	12	EA	500	6,000	175	2,100			8,100
		6" Blind Flange	2	EA	140	280	140	280			560
		Treated Water & WWS Pump Stn.									
		16" DI Pipe (2 ft sections w flanges)	10	EA	1,000	10,000	750	7,500			17,500
		16"x16" DI Tee	1	EA	3,130	3,130	626	626			3,756
		16"x12" DI Tee	1	EA	2,950	2,950	590	590			3,540
		16"x10" DI Tee	6	EA	2,670	16,020	534	3,204			19,224
		16"x6" DI Tee	6	EA	2,870	17,220	574	3,444			20,664
		16"x12" DI Reducer	1	EA	1,000	1,000	200	200			1,200
		16"x10" DI Reducer	2	EA	890	1,780	178	356			2,136
		16" FCA	1	EA	860	860	172	172			1,032
		16" BFV (Motor)	1	EA	6,800	6,800	2,040	2,040			8,840
		12" DI Pipe (2 ft sections w flanges)	6	EA	600	3,600	450	2,700			6,300
		12" 90 Elbow	5	EA	800	4,000	160	800			4,800
		12"x12" DI Tee	2	EA	1,250	2,500	250	500			3,000
		12"x8" DI Tee	6	EA	1,130	6,780	226	1,356			8,136
		12"x8" DI Reducer	1	EA	530	530	106	106			636
		12"x6" DI Reducer	4	EA	470	1,880	94	376			2,256
		12"x8" Reducing Elbow	1	EA	640	640	128	128			768
		10" DI Pipe (3 ft sections w flanges)	7	EA	630	4,410	473	3,308			7,718
		10" DI 90 Degree Elbow	3	EA	550	1,650	110	330			1,980
		10" FCA	1	EA	470	470	94	94			564
		10" Flapper Check Valve	3	EA	2,000	6,000	400	1,200			7,200
		10" BFV (Manual)	6	EA	1,800	10,800	360	2,160			12,960
		8" DI Pipe (2 ft sections w flanges)	14	EA	400	5,600	300	4,200			9,800
		8" DI Pipe (1'-3" sections w flanges)	1	EA	386	386	290	290			676
		8" Swing Check Valve	7	EA	1,330	9,310	266	1,862			11,172
		8" BFV (Manual)	12	EA	1,200	14,400	240	2,880			17,280
		6" DI Pipe (2 ft sections w flanges)	4	EA	330	1,320	250	1,000			2,320
		6" FCA	2	EA	330	660	165	330			990
		3" DI 90 Degree Elbow	3	EA	70	210	14	42			252
		Rubber Expansion Joints	18	EA	850	15,300	213	3,825			19,125
		SWW Pump Stn.									
		6" DI Pipe	25	LF	50	1,250	25	625			1,875
		6" DI 90 Degree Elbow	6	EA	160	960	50	300			1,260
		6" DI Tee	5	EA	230	1,150	46	230			1,380
		6" x 4" DI Reducer	2	EA	110	220	35	70			290
		6" x 4" Rubber Expansion Joint	2	EA	600	1,200	150	300			1,500
		6" x 3" Rubber Expansion Joint	2	EA	600	1,200	150	300			1,500
		6" Restrained Flex Coupling	2	EA	280	560	150	300			860
		6" Check Valve	2	EA	375	750	75	150			900
		6" BFV (Motor)	2	EA	1,450	2,900	725	1,450			4,350
		6" BFV (Manual)	4	EA	1,000	4,000	200	800			4,800
		4" DI Pipe	5	LF	40	200	35	175			375
		4" FCA	1	EA	250	250	125	125			375

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DIVISION 15 - MECHANICAL - Continued											
		Chemical Systems									
		Permanganate Pipe, Valves and Accessories	1	LS	2,000	2,000	2,000	2,000			4,000
		Coagulant Piping, Valves and Accessories	1	LS	2,000	2,000	2,000	2,000			4,000
		Hypochlorite Piping, Valves and Accessories	1	LS	2,000	2,000	2,000	2,000			4,000
		Corp Stop	3	EA	600	1,800	150	450			2,250
		Emergency Eyewash and Shower	1	EA	1,700	1,700	500	500			2,200
		Treated Water Tank									
		16" DI Pipe	30	LF	210	6,300	110	3,300			9,600
		16" DI 90 Degree Elbow	1	EA	1,900	1,900	350	350			2,250
		16" DI 45 Degree Elbow	2	EA	1,100	2,200	350	700			2,900
		16" Restrained Flex Coupling	2	EA	960	1,920	400	800			2,720
		16" BFV (Manual)	1	EA	1,800	1,800	360	360			2,160
		12" DI Pipe	10	LF	140	1,400	70	700			2,100
		12" DI 90 Degree Elbow	2	EA	800	1,600	200	400			2,000
		12" Restrained Flex Coupling	2	EA	630	1,260	250	500			1,760
		12" BFV (Manual)	1	EA	1,400	1,400	280	280			1,680
		6" BFV (Manual)	2	EA	1,000	2,000	200	400			2,400
		Spent Washwater EQ Tank									
		14" DI Pipe	30	LF	180	5,400	90	2,700			8,100
		14" DI 90 Degree Elbow	3	EA	1,350	4,050	250	750			4,800
		14" Restrained Flex Coupling	2	EA	790	1,580	300	600			2,180
		8" DI Pipe	10	LF	70	700	35	350			1,050
		8" DI 90 Degree Elbow	1	EA	300	300	150	150			450
		8" Restrained Flex Coupling	2	EA	370	740	200	400			1,140
		8" BFV (Manual)	1	EA	1,200	1,200	240	240			1,440
		6" DI Pipe	30	LF	50	1,500	25	750			2,250
		6" DI 90 Degree Elbow	3	EA	170	510	100	300			810
		6" Restrained Flex Coupling	2	EA	280	560	150	300			860
		6" Plug Valve (Manual)	1	EA	750	750	150	150			900
		Surface Washwater Booster Pump Stn.									
		14" x 8" DI Reducer (MJ)	1	EA	420	420	300	300			720
		8" DI Pipe (Buried)	5	LF	40	200	30	150			350
		8" DI 90 Degree Elbow (Buried)	1	EA	550	550	200	200			750
		8" DI 45 Degree Elbow (Buried)	2	EA	400	800	200	400			1,200
		8" DI Pipe	15	LF	70	1,050	35	525			1,575
		8" DI 90 Degree Elbow	1	EA	300	300	150	150			450
		8" DI Cross	1	EA	690	690	175	175			865
		8" DI Tee	1	EA	570	570	175	175			745
		8" x 4" Reducer	1	EA	170	170	150	150			320
		8" Blind Flange	1	EA	100	100	100	100			200
		8" x 6" Expansion Joint	2	EA	700	1,400	175	350			1,750
		8" BFV (Manual)	2	EA	1,200	2,400	240	480			2,880
		6" DI Pipe	15	LF	50	750	25	375			1,125
		6" DI 90 Degree Elbow	1	EA	170	170	100	100			270
		6" DI Tee	3	EA	250	750	125	375			1,125
		6" x 4" DI Reducer	2	EA	120	240	100	200			440
		6" x 4" Expansion Joint	2	EA	600	1,200	150	300			1,500
		6" Blind Flange	1	EA	70	70	75	75			145
		6" Check Valve	2	EA	375	750	75	150			900
		6" BFV (Manual)	2	EA	1,000	2,000	200	400			2,400
		6" BFV (Motor Operated)	1	EA	1,450	1,450	725	725			2,175
		4" DI Pipe	5	EA	40	200	35	175			375
		4" DI Side Outlet Elbow	1	EA	330	330	100	100			430
		4" FCA	1	EA	250	250	125	125			375
		4" Backpressure Regulating Valve	1	EA	1,320	1,320	330	330			1,650
		Miscellaneous									
		1" ARV	5	EA	500	2,500	150	750			3,250

OPINION OF PROBABLE CONSTRUCTION COST

KENNEDY/JENKS CONSULTANTS

ANK/SBE/DEC/
Project: Lessalt WTP DBP Reduction Improvements — **Prepared By:** SMA/CCL/AOR
Date Prepared: 9-Jan-13
Building, Area: — **KJ Proj. No.** 1068012*02

Current at ENR 10,367
Escalated to ENR
Months to Midpoint of Construct 10

Estimate Type: ☐ Conceptual ☐ Construction
☐ Preliminary (w/o plans) ☐ Change Order
☒ Design Development @ 95 % Complete

Spec. No.	Item No.	Description	Qty	Units	Materials $/Unit	Materials Total	Installation $/Unit	Installation Total	Sub-contractor $/Unit	Sub-contractor Total	Total
DIVISION 16 - ELECTRICAL											
		Conduit	1	LS	40,000	40,000	10,000	10,000			50,000
		Wire	1	LS	30,000	30,000	10,000	10,000			40,000
		MCC Section	13	EA	2,200	28,600	515	6,695			35,295
		MCC - Main Circuit Breaker, 800A	1	EA	7,775	7,775	915	915			8,690
		MCC - Feeder circuit breaker, 20-100A	15	EA	940	14,100	103	1,545			15,645
		MCC - Motor Starter, NEMA 2	2	EA	2,330	4,660	284	568			5,228
		MCC - Soft Starter, 30 hp	5	EA	7,900	39,500	515	2,575			42,075
		MCC - Outdoor enclosure	1	LS	15,000	15,000	5,000	5,000			20,000
		Adjustable Frequency Drive, 50 hp	6	EA	7,900	47,400	2,225	13,350			60,750
		Lighting Panelboard, 120/208V, 3-phase	2	EA	2,350	4,700	1,475	2,950			7,650
		Dry-type Transformer, 480-120/208V, 3-phase 45kVA	2	EA	1,550	3,100	1,025	2,050			5,150
		Main Switchboard, Circuit Breaker, 800A	2	EA	6,150	12,300	315	630			12,930
		Main Switchboard,Feeder Circuit Breaker, 1000A	1	EA	6,375	6,375	410	410			6,785
		Main Switchboard, Main Circuit Breaker, 2000A	1	EA	14,600	14,600	1,025	1,025			15,625
		Main Switchboard, Pull Section	1	EA	1,325	1,325	590	590			1,915
		Main Switchboard, Metering Section	1	EA	10,300	10,300	208	208			10,508
		Main Switchboard, Outdoor enclosure	1	LS	10,000	10,000	5,000	5,000			15,000
		Underground electrical, trenching	1	LS	8,000	8,000	12,000	12,000			20,000
		Grounding	1	LS	2,500	2,500	1,000	1,000			3,500
		Misc Electrical	1	LS	10,000	10,000	7,500	7,500			17,500
DIVISION 17 - INSTRUMENTATION											
		DO Analyzer	1	EA	3,000	3,000	1,000	1,000			4,000
		ORP Analyzer	4	EA	2,500	10,000	750	3,000			13,000
		Turbidimeter	2	EA	2,500	5,000	1,000	2,000			7,000
		TOC Analyzer	1	EA	30,000	30,000	2,000	2,000			32,000
		pH Analyzer	1	EA	1,500	1,500	500	500			2,000
		Chlorine Analyzer (OFCI)	1	EA	1	1	1,000	1,000			1,001
		Temperature Analyzer	1	EA	1,000	1,000	500	500			1,500
		Flowmeter, 12" Magnetic	1	EA	15,000	15,000	2,000	2,000			17,000
		Flowmeter, 10" Magnetic	1	EA	12,500	12,500	1,500	1,500			14,000
		Flowmeter, 6" Magnetic	2	EA	7,500	15,000	750	1,500			16,500
		Flowmeter, 4" Magnetic	2	EA	5,000	10,000	750	1,500			11,500
		Pressure transmitter, level measurement	2	EA	2,000	4,000	750	1,500			5,500
		Level transmitter, ultrasonic	2	EA	2,500	5,000	750	1,500			6,500
		Level switch, containment sump	1	EA	500	500	250	250			750
		Pressure transmitter	4	EA	2,000	8,000	750	3,000			11,000
		Pressure switch	2	EA	500	1,000	250	500			1,500
		Programmable Logic Controller, incl. panel, HMI	1	LS	10,000	10,000	5,000	5,000			15,000
		Programmable Logic Controller, programming and software	1	LS	5,000	5,000	5,000	5,000			10,000
		SCADA software, upgrade	1	LS	5,000	5,000	2,000	2,000			7,000
		SCADA modifications, programming	1	LS	5,000	5,000	5,000	5,000			10,000
		Instrument calibration	1	LS	2,000	2,000	5,000	5,000			7,000
		Subtotals				3,060,519		1,233,978			4,294,497
		Division 1 Costs	@	8%		244,842		98,718			343,560
		Subtotals				3,305,361		1,332,696			4,638,057
		Taxes - Materials Costs	@	8.25%		272,692					272,692
		Subtotals				3,578,053		1,332,696			4,910,749
		Taxes - Labor Costs	@								
		Subtotals				3,578,053		1,332,696			4,910,749
		Contractor OH&P	@	12%		429,366		159,924			589,290
		Subtotals				4,007,419		1,492,620			5,500,039
		Estimate Contingency	@	8%							440,003
		Subtotals									5,940,042
		Escalate to Midpoint of Construct	@	1%							49,500
		Estimated Bid Cost									5,989,542
		Total Estimate (Rounded)									5,990,000

EXHIBIT 4.2

WICK DRAIN AND STEEL TANK QUOTE

From: "Foster, Jimmy" <jgfoster@HaywardBaker.com>
Subject: **RE: Wick Drains for Pajaro Sunny Mesa**
Date: January 25, 2013 7:53:39 AM PST
To: "Nicholas E. Panofsky" <NicholasPanofsky@KennedyJenks.com>

Sorry for being a day late. Here is an estimates of square footage of 14,400 sq ft with different spacing.

6' spacing estimated 18,421 lf.
5' spacing estimated 26,605 lf.
4' spacing estimated 41,618 lf.
These are based on 40' depth.
Mobilization per rig $25,000.00
Price per. Foot installed $ 1.10 per ft.

If you need more information get back with me. Thank You H B Wick Drains Jimmy Foster 925 261 9704

From: Nicholas E. Panofsky [mailto:NicholasPanofsky@KennedyJenks.com] **Sent:** Wednesday, January 23, 2013 2:09 PM **To:** Foster, Jimmy **Subject:** RE: Wick Drains for Pajaro Sunny Mesa

Jimmy,

Thanks for getting back to me. For this project, we are in the preliminary phase, and have no geotechnical information. We are trying to do some preliminary calculations for our client to get funding for the project. We are basing our assumptions that a wick drain is needed on the wick drains installed on an adjacent storage tank. The Tank foot print will be 85' to 120' in diameter. Do you think we could come up with a budgetary price for something that would work?

I can talk any time after 2:15 California Time today.

Thanks!

-Nick

From: Foster, Jimmy [mailto:jgfoster@HaywardBaker.com] **Sent:** Wednesday, January 23, 2013 12:05 PM **To:** Nicholas E. Panofsky **Subject:** RE: Wick Drains for Pajaro Sunny Mesa

Can you send me some borings? I have been working on a water tank for the City of Woodland Calif. And some of the problems is having enough area to build the surcharge up to 20' or 30' depending how big the tank is. One suggestion I had was to figure out how much settlement you expect, put that much fill in and then build the tank and fill it full of water before you hook up all the piping. Just a suggestion. What time would be good to call and talk?

From: Nicholas E. Panofsky [mailto:NicholasPanofsky@KennedyJenks.com] **Sent:** Wednesday, January 23, 2013 1:40 PM **To:** Foster, Jimmy **Subject:** Wick Drains for Pajaro Sunny Mesa

Good Afternoon!

We are currently in the preliminary phase of a design for a new potable water storage tank for a client near Santa Cruz. The soils are moderately unstable, and we are looking at installing a wick drain system to expedite consolidation. Can you provide me with a recommended design, and budgetary pricing for an applicable system? Please contact me with questions.

Thanks!

Nick Panofsky, P.E. | Civil Engineer Kennedy/Jenks Consultants
Hawaii Office 3375 Koapaka Street, Suite F227 | Honolulu, HI 96819
Office: 808.488.0477 | Direct: 808.218.6044 | F: 808.488.3776

AZ #119975 • CA #333989 • NV #0038929

Spiess Construction Co., Inc.

P.O. Box 2849
Santa Maria, CA 93457-2849
(805) 937-5859
Fax (805) 934-4432

PROPOSAL/SCOPE LETTER

DATE: January 23, 2013

TO: Kennedy/Jenks Consulting

ATTN: Nick Panofsky

EMAIL: NicholasPanofsky@kenedyJenks.com

REFERENCE: Pajaro Sunny Mesa Water
Watsonville, CA
600,000 Gallon Welded Steel Water Storage Tank

Gentlemen:

On behalf of Spiess Construction Co., Inc., we want to thank you for the opportunity to submit the follwing budget estimate for the above referenced welded steel water storage tank.

For the sum set forth below, we will furnish the labor, material, equipment, supervision, insurance, etc., to erect: one (1) 85-0"diameter x 16'-0" shell height welded steel water storage reservoir with knuckle roof on a concrete ringwall foundation designed by SCCI and constructed by others on an overexcavated subgrade with a minimum soil bearing pressure of 2500 PSI. Our pricing includes surface preparation and coatings application, disinfection and water quality testing. Tank to be in designed and erected in accordance with AWWA D100 Standards and technical plans and specifications prepared by the Kennedy/Jenks, subject to SCCI review of final plans and concurrence that they are consistence with the premises utilized to prepare this budget estimate.

Our Total Combined Price for the Above Tank & Coatings is: $ 570,300.00

Concrete Ringwall Foundation Without having read a soils report for the tank site, we are basing our pricing on a steel reinforced concrete ringwall measuring 18" wide by 36" deep (6" above grade and 30" below) and filled with a 6" layher of crushed rock or ¾" Cl II aggregate base topped with a 3" layer of oiled sand.

Total Foundation Price of: $ 128,850 .00

The following appurtenances are also included:

- 1 ea center roof vent
- 1 ea roof hatch
- 1 ea roof hatch handrail enclosure
- 1 ea exterior ladder with anti-climb security gate
- 1 ea interior steel ladder
- 1 ea overflow with internal cone weir and screened open end

- 1 ea 16" inlet/outlet shell nozzle
- 2 ea 30" AWWA inward swing shell manways
- 1 ea lot anchor bolts for seismic holddown
- 1 ea liquid level indicator

EXCLUSIONS:

- Any and all appurtenances not listed above.
- If the tank foundation pad will be constructed by others, then it shall be to a 0.1' (±) tolerance in all directions, prior to our arrival. Tank pad center shall be crowned 6".
- We specifically exclude any and all under tank piping or piping beyond the first flange or nozzle on the tank shell
- We specifically exclude any electrical, telemetry, or similar devices.
- Water for testing and disinfection and filling the tank shall be supplied to and disposed from the tank site by others.
- We exclude costs for obtaining or purchasing building permits or any other permits required of a temporary or permanent nature.
- We exclude environmetal controls such as dehumidification, contaninment, external heat, etc.

QUALIFICATIONS AND CLARIFICATIONS:

SCCI assumes the site will be a clear, level, open and semi-truck with 40-foot trailer and or/ crane accessible, free of overhead obstructions.

SCCI's price is based upon using non-union, Merit Shop labor, working 8 hours per day, 5 days per week or 10 hours per day, 4 days per week, left to SCCI's discretion.

The work is proposed at prevailing rates for boilermakers and laborers in California. Any required subcontract work is also quoted at prevailing rates.

The design of this structure is in accordance with AWWA, API and project specifications, unless modified herein.

SCCI reserves the right to use welding processes and equipment as per SCCI's standard qualified welding procedures.

SCCI's additional cost for a performance bond, if required, is 1.0% of our bid.

The terms as required by SCCI are monthly progress payments of one hundred percent (100%) of work completed, less five percent (5%) retention. Engineering, fabrication and/or receipt of material by SCCI shall constitute work completed. The retention is to be paid upon test and acceptance but no later than thirty-five (35) days after completion of the tank.

SCHEDULE: Upon receipt of a signed contract for the project SCCI proposes to:

Note: Based upon our present workload, it is anticipated that the earliest start date for field erection will be May 15, 2013.

- Submit design calculations and detail drawings for review and approval within 3 weeks.
- Allowing 10-12 weeks for procurement of special materials we can have shop fabrication completed in 3-4 additional weeks.
- Field construction for the steel tank is expected to take about 4-5 weeks to complete.
- Coating & painting is expected to take an additional 3-4 weeks
- Wash down, disinfection, and Bac-T & VOC testing will take 7-10 days.

Note: Foundation can be constructed during the shop fabrication period.

Final schedule to be negotiated upon award of contract. Should you require an escalated schedule we are willing to discuss options available.

This quote is good for 30 days.

Note: Due to the present steel market conditions, the above pricing is based on current market price of steel and is subject to change upon prevailing market price at the time of promised delivery. Should you favor us with acceptance of this proposal, we will place a steel order immediately upon receipt of your written letter of intent or subcontract agreement.

Should you have any questions or need additional information, please call.

RESPECTFULLY SUBMITTED,
SPIESS CONSTRUCTION CO., INC.

Barry L. Matchett,
Tank Division Manager